IN THE CLAIMS:

Please amend the claims as indicated in the following listing of claims, which replaces all previous listings of claims.

1. (Previously Presented) A method of detecting microorganism cDNA comprising:

(a) amplifying the microorganism cDNA with bioactive primers;

(b) hybridizing the amplified microorganism cDNA with microorganism-specific probes in hybridization tubes wherein each of the probes is linked to a magnetic bead;

(c) transferring hybridization tubes to magnetic wells for washing;

(d) adding blocking solution into the tubes;

(e) adding avidin enzyme complex or streptavidin enzyme complex into the tubes, wherein the enzyme reacts with a luminescence-emission substrate;

(f) performing a washing reaction to remove interfering material by the aid of magnetic field;

(g) suspending each magnetic bead;

(h) detecting a light-emission change utilizing the luminescence-emission substrate; and

(i) comparing the light-emission change in step (h) to a light-emission change of a control sample.

2. (Previously Presented) The method of Claim 1, wherein the microorganism is *Mycobacterium tuberculosis*.

3. (Original) The method of Claim 1, wherein the microorganism cDNA are obtained from the PCR amplification mediated by bioactive primers.

4. (Previously Presented) The method of Claim 1, wherein the streptavidin enzyme complex in the step (e) is streptavidin horseradish peroxidase (SA-HRP).

5. (Previously Presented) The method of Claim 1, wherein the step (g) suspending magnetic beads is performed by vortexing the tubes.

6. (Previously Presented) The method of Claim 1, wherein the detection of the step (h) is performed by luminometer or spectrophotometer.

7. (Previously Presented) The method of Claim 1, wherein the steps (a)-(h) are performed in the same tube.

Claims 8-10. (Canceled)

11. (Previously Presented) A system for performing detection of microorganism cDNA comprising:

(a) a microorganism-specific probe linked to a magnetic bead;

(b) bioactive primers;

(c) a luminescence-emission substrate;

(d) avidin enzyme complex or streptavidin enzyme complex, wherein the enzyme is capable of reacting with the luminescence-emission substrate.

12. (Previously Presented) The system of Claim 11, wherein the bioactive primers are made by reacting a DNA labeling reagent with the primers.

13. (Previously Presented) The system of Claim 12, wherein the DNA labeling reagent is a compound having a formula:

Fu-BE-D

wherein FU represents a Furocoumarin compound selected from the group consisting of angelicin compound and psoralen compound;

wherein BE represents none or a binding enhancer selected from the group consisting of C4-C12 alkyl, alkyenyl, polyalkylamine and polyethylene glycol; and

wherein D represents a detectable group selected from the group consisting of: biotin, fluorescence, acridinium ester and acridinium-9-carboxamide.

14. (Previously Presented) The system of Claim 12, wherein the DNA labeling reagent is 9-(4"-(Aminomethyl)-4',5"-Dimethyl-angelicin) acridinium carboxamide.

Claims 15-20. (Canceled)